REMARKS

The current office action has been carefully considered together with the present application and minor amendments have been made to emphasize important differences between the invention as claimed and the prior art.

It is noted that the examiner has removed the rejections under 35 U.S.C. 112, second paragraph, as being indefinite, but has maintained the rejections under sections 102 and 103 as set forth in the initial office action.

Applicants continue to believe that independent claims 1, 16 and 17, as particularly currently amended, are simply not anticipated, taught nor suggested by Ben-Nun, applied singularly or in combination with Bennett for the reason that Ben-Nun fails to anticipate, teach or suggest the steps recited for either the receiver or the transmitter in these claims. The law of anticipation has clearly been enunciated by the Court of Appeals for the Federal Circuit. An invention is anticipated if the same device, including *all* the claim limitations, is shown in a single prior art reference. Every element of the claimed invention must be literally present, arranged as in the claims in question. *Scripps Clinic and Research Found. v. Genentech, Inc.*, 927 F.2d 1565, 1576 (Fed. Cir. 1991); *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989); *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548 (Fed. Cir. 1983). The *identical* invention must be shown by the prior art reference in as much detail as is contained in the patent claim. *Richardson v. Suzuki Motor Co., Ltd.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989); *Continental Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1267 (Fed. Cir. 1991); *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 780 (Fed. Cir. 1985).

Ben-Nun simply does not anticipate claims 1, 16 and 17. With regard to claim 1, it is directed to a method which includes the steps:

> the receiver sending a single virtual channel credit packet for a particular virtual channel to the transmitter, said credit packet being indicative that said receiver is available to receive a single data packet and having a unique virtual channel number assigned to said particular virtual channel thereto;

the transmitter responding to said virtual channel credit packet including transmitting a single data packet on said assigned unique virtual channel to the receiver if a data packet is available;

Ben-Nun does not operate in this manner. As has been previously stated in applicants' Amendment A, Ben-Nun's system operates as follows: "In credit-based ATM flow control, which is described fully with reference to FIG. 4, the credit VCI field (68 and 70) of each arriving ATM cell 60 (of FIG. 3) identifies the transmit virtual circuit (VC) which is given a new credit for transmission from a transmitter to a receiver." (column 5, lines 46-51) This operation therefore has the **transmitter** identifying the virtual circuit number in which data is to be transmitting which is exactly opposite to that which occurs in the method of claim 1. As is clearly indicated in claim 1, the **receiver** specifies the unique virtual channel number inasmuch as the unique virtual channel number is part of the credit packet that is sent by the receiver to the transmitter. The transmitter then responds to said virtual channel credit packet by transmitting a data packet on said assigned unique virtual channel to the receiver if a data packet is available.

There is another important difference that has been emphasized in claim 1, in that the claim explicitly states that it is a method for transmitting data one data packet at a time between at least one receiver operatively connected to at least one transmitter via at least one high-speed link having a plurality of virtual channels. The method steps also explicitly state that "the receiver sending a **single** virtual channel credit packet . . . and is available to receive a **single** data packet . . ." Similarly, "the transmitter . . . transmitting a **single** data packet . . ."

This operation is therefore different from Ben-Nun in a very important respect. The claimed method is believed to be more efficient than the system of Ben-Nun for the reason that the receiver is the entity which controls the transmission of data and it signals the transmitter that it is available to receive a data packet when it sends a credit packet to the transmitter. By including the unique virtual channel number in the credit packet, it officially specifies the channel identity which the transmitter then uses to transmit a data packet. The quoted language from the Ben-

8

Nun specification requires more steps to issue a credit, define a virtual circuit and transmit a data packet than that of the method of claim 1.

Ben-Nun also does not operate on a single credit packet to data packet operation that is set forth in the method as claimed. Applicants' method and system is a less complex type of operation than that described with regard to the Ben-Nun system. Clearly, the use of multiple credits enabling a large number of cells to be sent as well as the use of dynamic tools, static tools, active cues, stalled cues and the like greatly increases the complexity of such a system compared to the method of amended claim 1.

The relative simplicity of Applicants method and system compared to Ben-Nun's system is much more significant that the examiner recognizes. There are other important advantages of applicants' method and system that result from the single credit packet and single data packet type of operation. neither need nor use intermediary devices such as Ben-Nun's ATM switches. Since multiple credits are allowed by Ben-Nun, the operation of the devices are more complex. The intermediary devices, such as ATM switches, which Applicants' system does not need or use, requires a Pool of credits that anticipates the needs of all the different nodes. Ben-Nun's VCIs may not be shared fairly if credits are over-allocated. Applicants' system by definition guarantees fair throughput, since an implementation can know exactly how many VCNs it needs to support. Routing a single VCN is also simpler since the various active and stalled queues are not needed.

For these reasons, it is believed that Ben-Nun fails to anticipate, teach or suggest claim 1, and reconsideration and allowance of claim 1 is respectfully requested.

Since claims 16 and 17 are system claims for which the same arguments presented above equally apply, reconsideration and allowance of these claims are also requested. Additionally, since the dependent claims necessarily incorporate the subject matter of the independent claims from which they depend, in addition to reciting other features and functionality, it is believed that the dependent claims are

9

also in condition for immediately allowance. Reconsideration and allowance of all claims presently pending in the application is respectfully requested.

Respectfully submitted,

GREER, BURNS & CRAIN, LTD.

By Roger D. Greer
Registration No. 26,174

November 21, 2003

300 South Wacker Drive
Suite 2500
Chicago, Illinois 60606
(312) 360-0080
Customer No. 24978
F:\Data\Wp60\3417\63665\10001011-1 Amendment B.doc